

Complete Summary

TITLE

Venous thromboembolism (VTE): percentage of patients diagnosed with VTE who meet the criteria for low-molecular-weight heparin (LMWH) and for whom LMWH is used.

SOURCE(S)

Institute for Clinical Systems Improvement (ICSI). Venous thromboembolism. Bloomington (MN): Institute for Clinical Systems Improvement (ICSI); 2006 Feb. 91 p. [202 references]

Measure Domain

PRIMARY MEASURE DOMAIN

Process

The validity of measures depends on how they are built. By examining the key building blocks of a measure, you can assess its validity for your purpose. For more information, visit the [Measure Validity](#) page.

SECONDARY MEASURE DOMAIN

Does not apply to this measure

Brief Abstract

DESCRIPTION

This measure is used to assess the percentage of patients diagnosed with venous thromboembolism (VTE) who meet the criteria for low-molecular-weight heparin (LMWH) and for whom LMWH is used.

RATIONALE

The priority aim addressed by this measure is to improve quality of care and cost-effectiveness of the diagnosis and treatment of venous thromboembolism (VTE).

PRIMARY CLINICAL COMPONENT

Venous thromboembolism (VTE); low-molecular-weight heparin (LMWH)

DENOMINATOR DESCRIPTION

Number of patients diagnosed with lower extremity venous thromboembolism (VTE) who meet the criteria for low-molecular-weight heparin (LMWH) (see the related "Denominator Inclusions/Exclusions" field in the Complete Summary)

NUMERATOR DESCRIPTION

Number of patients with a diagnosis of venous thromboembolism (VTE) who are treated with low-molecular-weight heparin (LMWH) (see the related "Numerator Inclusions/Exclusions" field in the Complete Summary)

Evidence Supporting the Measure

EVIDENCE SUPPORTING THE CRITERION OF QUALITY

- A clinical practice guideline or other peer-reviewed synthesis of the clinical evidence

NATIONAL GUIDELINE CLEARINGHOUSE LINK

- [Venous thromboembolism.](#)

Evidence Supporting Need for the Measure

NEED FOR THE MEASURE

Unspecified

State of Use of the Measure

STATE OF USE

Current routine use

CURRENT USE

Internal quality improvement

Application of Measure in its Current Use

CARE SETTING

Physician Group Practices/Clinics

PROFESSIONALS RESPONSIBLE FOR HEALTH CARE

Physicians

LOWEST LEVEL OF HEALTH CARE DELIVERY ADDRESSED

Group Clinical Practices

TARGET POPULATION AGE

Age greater than or equal to 18 years

TARGET POPULATION GENDER

Either male or female

STRATIFICATION BY VULNERABLE POPULATIONS

Unspecified

Characteristics of the Primary Clinical Component

INCIDENCE/PREVALENCE

Unspecified

ASSOCIATION WITH VULNERABLE POPULATIONS

Unspecified

BURDEN OF ILLNESS

Unspecified

UTILIZATION

Unspecified

COSTS

Unspecified

Institute of Medicine National Healthcare Quality Report Categories

IOM CARE NEED

Getting Better

IOM DOMAIN

Effectiveness

CASE FINDING

Users of care only

DESCRIPTION OF CASE FINDING

Patients diagnosed with venous thromboembolism (VTE) who meet the criteria for low-molecular-weight heparin (LMWH)

Identify patients diagnosed with VTE using the specified diagnosis codes (see the "Denominator Inclusions/Exclusions" field). Some medical groups will be able to identify the population of patients through patient computer records of International Classification of Diseases, Ninth Revision (ICD-9) codes. If this is not possible, a list of patients may be generated from the laboratory log for compression ultrasounds with a diagnosis of VTE.

The medical record of each patient is reviewed to determine if the patient meets any of the exclusion criteria (see the "Denominator Inclusions/Exclusions" field). If none of the exclusions are met, the chart is further reviewed for administration of LMWH.

During review, additional information on the number of days of treatment, and whether treatment was continued until the international normalized ratio (INR) was above 2.0 for two consecutive days, is collected. In addition, some medical groups may want to track the percent of patients treated with LMWH who received treatment in an outpatient setting.

The suggested time frame for data collection is a calendar month.

DENOMINATOR SAMPLING FRAME

Patients associated with provider

DENOMINATOR INCLUSIONS/EXCLUSIONS

Inclusions

Number of patients diagnosed with lower extremity venous thromboembolism (VTE)* who meet the criteria for low-molecular-weight heparin (LMWH)

*Patients diagnosed with lower extremity VTE as identified by the following International Classification of Diseases, Ninth Revision (ICD-9) codes: 451.11, 451.19, 451.2, 453.8.

Exclusions

Patients are excluded for any of the following conditions:

- Any VTE other than lower extremity
- Suspected or confirmed pulmonary embolus
- Contraindications to anticoagulation

- Familial bleeding or clotting disorders
- History of heparin-induced thrombocytopenia
- Pregnancy
- Phlegmasia/extensive iliofemoral disease
- Renal dysfunction requiring dialysis

RELATIONSHIP OF DENOMINATOR TO NUMERATOR

All cases in the denominator are equally eligible to appear in the numerator

DENOMINATOR (INDEX) EVENT

Clinical Condition

DENOMINATOR TIME WINDOW

Time window precedes index event

NUMERATOR INCLUSIONS/EXCLUSIONS

Inclusions

Number of patients with a diagnosis of venous thromboembolism (VTE) who are treated with low-molecular-weight heparin (LMWH)*

*Patients treated with LMWH (listed with GCN code 7542). Include only patients who meet the criteria for the denominator.

Exclusions

Unspecified

MEASURE RESULTS UNDER CONTROL OF HEALTH CARE PROFESSIONALS, ORGANIZATIONS AND/OR POLICYMAKERS

The measure results are somewhat or substantially under the control of the health care professionals, organizations and/or policymakers to whom the measure applies.

NUMERATOR TIME WINDOW

Episode of care

DATA SOURCE

Administrative data
Medical record

LEVEL OF DETERMINATION OF QUALITY

Individual Case

PRE-EXISTING INSTRUMENT USED

Unspecified

Computation of the Measure

SCORING

Rate

INTERPRETATION OF SCORE

Better quality is associated with a higher score

ALLOWANCE FOR PATIENT FACTORS

Unspecified

STANDARD OF COMPARISON

Internal time comparison

Evaluation of Measure Properties

EXTENT OF MEASURE TESTING

Unspecified

Identifying Information

ORIGINAL TITLE

Percentage of patients diagnosed with VTE who meet the criteria for LMWH and for whom LMWH is used.

MEASURE COLLECTION

[Venous Thromboembolism Measures](#)

DEVELOPER

Institute for Clinical Systems Improvement

ADAPTATION

Measure was not adapted from another source.

RELEASE DATE

2003 Apr

REVISION DATE

2006 Feb

MEASURE STATUS

This is the current release of the measure.

This measure updates a previous version: Institute for Clinical Systems Improvement (ICSI). Venous thromboembolism. Bloomington (MN): Institute for Clinical Systems Improvement (ICSI); 2005 Apr. 99 p.

SOURCE(S)

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MEASURE AVAILABILITY

The individual measure, "Percentage of patients with VTE who meet the criteria for LMWH and for whom LMWH is used," is published in "Health Care Guideline: Venous Thromboembolism." This document is available from the [Institute for Clinical Systems Improvement \(ICSI\) Web site](#).

For more information, contact ICSI at, 8009 34th Avenue South, Suite 1200, Bloomington, MN 55425; phone: 952-814-7060; fax: 952-858-9675; Web site: www.icsi.org; e-mail: icsi.info@icsi.org.

NQMC STATUS

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